

U.S.S.N.: 10/708,955

7

04-0016/015368 (BOE 0480 PA)

Amendments To The Claims:

Claim 1 (Currently Amended): An integrated transport system for moving an object in an aircraft between a main cabin and an overhead cabin, the main cabin and the overhead cabin having a shaft in connection therebetween, comprising:

a single-unit gantry-lift device including an object carrier ~~for receiving the object, said object carrier having~~ with at least one restraint member for securing the object in said object carrier and preventing the object from tipping;

~~wherein~~ said single-unit gantry-lift device further including ~~includes~~ a lift device and a gantry device;

said lift device ~~[[for]]~~ moving said object carrier generally along a ~~[[of]]~~ longitudinal axis of the shaft; ~~[[and a]]~~

said gantry device ~~[[for]]~~ moving said object carrier generally along at least one lateral axis of said overhead cabin; ~~at least one of a first axis of said overhead cabin and a second axis disposed generally perpendicular to said first axis.~~

the object being at least one of a galley meal cart and a galley refreshment cart.

Claim 2 (Original): The integrated transport system recited in claim 1 wherein said main cabin is a main deck galley, said overhead cabin being an overhead galley.

Claim 3 (Currently Amended): The integrated transport system recited in claim 1 wherein said at least one restraint member is ~~[[a]]~~ selected from the group consisting of at least one belt member, at least one plate member, at least one netting member, and at least one rope member.

U.S.S.N.: 10/708,955

8

04-0016/015368 (BOE 0480 PA)

Claim 4 (Currently Amended): The integrated transport system recited in claim 1 wherein said lift device is selected from the group consisting of ~~includes~~ ~~at least one of~~ a pulley mechanism, a screw mechanism, and a belt mechanism for moving said object carrier along said longitudinal axis of said shaft.

Claim 5 (Original): The integrated transport system recited in claim 1 wherein at least one of said lift device and said gantry device is a manually operated mechanism.

Claim 6 (Cancelled)

Claim 7 (Currently Amended): An integrated transport system for moving an object in an aircraft between a main cabin and an overhead cabin, the main cabin and the overhead cabin having a shaft in connection therebetween, comprising:

a single-unit gantry-lift device including an object carrier ~~for receiving the object, said object carrier having~~ with at least one restraint member for securing the object in said object carrier and preventing the object from tipping;

~~wherein~~ said single-unit gantry-lift device further including ~~includes~~ a lift device and a gantry device;

said lift device ~~[[for]]~~ moving said object carrier generally along a longitudinal axis of the shaft; ~~[[and a]]~~

said gantry device ~~[[for]]~~ moving said lift device and said object carrier generally along at least one lateral axis of said overhead cabin; ~~at least one of a first axis of said overhead cabin and a second axis disposed generally perpendicular to said first axis~~;

U.S.S.N.: 10/708,955

9

04-0016/015368 (BOE 0480 PA)

wherein said gantry device including ~~includes~~ a pair of rails coupled to said overhead cabin of said airframe;[[.]]

said pair of rails [[for]] suspending said object carrier therefrom and preventing said object carrier from tipping;[[.]]

said pair of rails ~~further utilized for~~ moving said object carrier generally along said at least one axis ~~said first axis~~ of said overhead cabin;[[.]]

at least one of said lift device and said gantry device being a manually operated mechanism.

Claim 8 (Original): The integrated transport system recited in claim 7 wherein said main cabin is a main deck galley, said overhead cabin being an overhead galley.

Claim 9 (Currently Amended): The integrated transport system recited in claim 7 wherein said at least one restraint member is [[a]] selected from the group consisting of at least one belt member, at least one plate member, at least one netting member, and at least one rope member.

Claim 10 (Currently Amended): The integrated transport system recited in claim 7 wherein said lift device is selected from the group consisting of ~~includes at least one of~~ a pulley mechanism, a screw mechanism, and a belt mechanism for moving said object along said longitudinal axis of said shaft.

Claim 11 (Currently Amended): The integrated transport system recited in claim 7 wherein said pair of rails and said lift device have at least one of a rolling member and a sliding member coupled therebetween for moving said object carrier generally along said at least one lateral axis ~~said first axis~~ of said overhead cabin.

U.S.S.N.: 10/708,955

10

04-0016/015368 (BOE 0480 PA)

Claim 12 (Cancelled)

Claim 13 (Original): The integrated transport system recited in claim 7 wherein the object is at least one of a galley meal cart and a galley refreshment cart.

Claim 14 (Currently Amended): An aircraft comprising:

an airframe defining a main cabin, an overhead cabin above said main cabin, and a shaft extending therebetween;

said shaft having a longitudinal axis;

said overhead cabin storing at least one object therein and having at least one lateral axis; and

an integrated transport system moving an object between said main cabin and said overhead cabin;

said integrated transport system including an object carrier with at least one restraint member for securing said object in said object carrier;

said integrated transport system further including a single-unit gantry-lift device comprised of a lift device and a gantry device;

said lift device moving said object through said shaft generally along said longitudinal axis;

said gantry device moving said object generally along said at least one lateral axis of said overhead cabin.

~~an airframe;~~

~~a main cabin defined by said airframe;~~

~~an overhead cabin defined by said airframe and disposed above said main cabin, said overhead cabin for storing at least one object therein, said overhead~~

U.S.S.N.: 10/708,955

11

04-0016/015368 (BOE 0480 PA)

~~cabin having a first axis and a second axis disposed substantially perpendicular to said first axis;~~

~~a shaft defined by said airframe and extending between said main cabin and said overhead cabin, said shaft having a longitudinal axis; and~~

~~an integrated transport system for moving an object between said main cabin and said overhead cabin, said integrated transport system including a single unit gantry lift device comprised of a lift device for moving said object through said shaft generally along said longitudinal axis and a gantry device for moving said object generally along at least one of said first axis and said second axis of said overhead cabin;~~

~~wherein said single unit gantry lift device further includes an object carrier for receiving said object, said object carrier having at least one restraint member for securing said object in said object carrier.~~

Claim 15 (Original): The aircraft recited in claim 14 wherein said main cabin is a main deck galley, said overhead cabin being an overhead galley.

Claim 16 (Currently Amended): The aircraft recited in claim 14 wherein said at least one restraint member is [[a]] selected from the group consisting of at least one belt member, at least one plate member, at least one netting member, and at least one rope member.

Claim 17 (Original): The aircraft recited in claim 14 wherein said lift device includes at least one of a pulley mechanism, a screw mechanism, and a belt mechanism for moving said object along said longitudinal axis of said shaft.

U.S.S.N.: 10/708,955

12

04-0016/015368 (BOE 0480 PA)

Claim 18 (Currently Amended): An aircraft comprising:

an airframe defining a main cabin, an overhead cabin above said main cabin, and a shaft extending therebetween;

said shaft having a longitudinal axis;

said overhead cabin storing at least one object therein and having at least one lateral axis; and

an integrated transport system moving an object between said main cabin and said overhead cabin;

said integrated transport system including an object carrier with at least one restraint member for securing said object in said object carrier;

said integrated transport system further including a single-unit gantry-lift device comprised of a lift device and a gantry device;

said lift device moving said object through said shaft generally along said longitudinal axis;

said gantry device moving said object generally along said at least one lateral axis of said overhead cabin.

said gantry device including a pair of rails coupled to said airframe in said overhead cabin;

said pair of rails suspending said object carrier therefrom, preventing said object carrier from tipping, and moving said object carrier generally along said at least one lateral axis of said overhead cabin.

an airframe;

a main cabin defined by said airframe;

an overhead cabin defined by said airframe and disposed above said main cabin, said overhead cabin for storing at least one object therein, said overhead cabin having a first axis and a second axis disposed substantially perpendicular to said first axis;

U.S.S.N.: 10/708,955

13

04-0016/015368 (BOE 0480 PA)

~~a shaft defined by said airframe and extending between said main cabin and said overhead cabin, said shaft having a longitudinal axis; and~~

~~an integrated transport system for moving an object between said main cabin and said overhead cabin, said integrated transport system including a single unit gantry lift device comprised of a lift device for moving an object through said shaft generally along said longitudinal axis and a gantry device for moving said object generally along at least one of said first axis and said second axis of said overhead cabin;~~

~~wherein said single unit gantry lift device further includes an object carrier for receiving said object, said object carrier having at least one restraint member for securing said object in said object carrier;~~

~~wherein said gantry device includes a pair of rails coupled to said airframe in said overhead cabin, said pair of rails for suspending said object carrier therefrom and preventing said object carrier from tipping, said pair of rails further utilized for moving said object carrier generally along said first axis of said overhead cabin.~~

Claim 19 (Original): The aircraft recited in claim 18 wherein said main cabin is a main deck galley, said overhead cabin being an overhead galley.

Claim 20 (Currently Amended): The aircraft recited in claim 18 wherein said at least one restraint member is [[a]] selected from the group consisting of at least one belt member, at least one plate member, at least one netting member, and at least one rope member.

U.S.S.N.: 10/708,955

14

04-0016/015368 (BOE 0480 PA)

Claim 21 (Original): The aircraft recited in claim 18 wherein said lift device includes at least one of a pulley mechanism, a screw mechanism, and a belt mechanism for moving said object along said longitudinal axis of said shaft.

Claim 22 (Currently Amended): The aircraft recited in claim 18 wherein said pair of rails has at least one of a rolling member and a sliding member coupled thereto and extending ~~which extends~~ from said lift device for moving said object carrier generally along said at least one lateral axis ~~said first axis~~ of said overhead cabin.

Claim 23 (Currently Amended): An aircraft comprising:

an airframe including a bi-level galley module with a main-deck sub-module and an overhead sub-module disposed above said main-deck sub-module;

said overhead sub-module storing at least one object therein and having at least one lateral axis;

a shaft defined by said bi-level galley module and extending between said main-deck sub-module and said overhead sub-module;

said shaft having a longitudinal axis perpendicular to said at least one lateral axis;

an integrated transport system moving said at least one object through said shaft and between said main-deck sub-module and said overhead sub-module;

said integrated transport system including a single-unit gantry-lift device comprised of a lift device and a gantry device;

said lift device moving said at least one object along said longitudinal axis;

said gantry device moving said object along said at least one lateral axis;

U.S.S.N.: 10/708,955

15

04-0016/015368 (BOE 0480 PA)

a ladder extending between said main-deck sub-module and said overhead sub-module for allowing ingress and egress to said overhead sub-module;

a walkway extending generally along said lateral axis of said overhead sub-module; and

at least one storage area adjacent to said walkway;

said single-unit gantry-lift device further including an object carrier with at least one restraint member for securing said at least one object in said object carrier;

said gantry device including a pair of rails coupled to said overhead sub-module;

said pair of rails suspending said object carrier therefrom, preventing said object carrier from tipping, and moving said object carrier generally along said at least one lateral axis of said overhead sub-module.

~~an airframe including a bi-level galley module with a main-deck sub-module and an overhead sub-module disposed above said main-deck sub-module, said overhead sub-module for storing at least one object therein and having a first axis and a second axis disposed generally perpendicular to said first axis;~~

~~a shaft defined by said bi-level galley module and extending between said main-deck sub-module and said overhead sub-module, said shaft having a longitudinal axis;~~

~~an integrated transport system for moving an object through said shaft and between said main-deck sub-module and said overhead sub-module, said integrated transport system including a single-unit gantry lift device comprised of a lift device for moving said object along said longitudinal axis and a gantry device for moving said object along at least one of said first axis and said second axis;~~

U.S.S.N.: 10/708,955

16

04-0016/015368 (BOE 0480 PA)

~~a ladder extending between said main deck sub-module and said overhead sub-module for allowing ingress and egress to said overhead sub-module;~~

~~a walkway extending generally along said first axis of said overhead sub-module; and~~

~~at least one storage area disposed adjacent to said walkway and offset therefrom in a direction generally along said second axis of said overhead sub-module, said at least one storage area also being located above said walkway.~~

~~wherein said single unit gantry lift device further includes an object carrier for receiving said object, said object carrier having at least one restraint member for securing said object in said object carrier;~~

~~wherein said gantry device includes a pair of rails coupled to said overhead sub-module, said pair of rails for suspending said object carrier therefrom and preventing said object carrier from tipping, said pair of rails further utilized for moving said object carrier generally along said first axis of said overhead sub-module.~~

Claim 24 (Currently Amended): The aircraft recited in claim 23 wherein said at least one restraint member is [[a]] selected from the group consisting of at least one belt member, at least one plate member, at least one netting member, and at least one rope member.

Claim 25 (Original): The aircraft recited in claim 23 wherein said lift device includes at least one of a pulley mechanism, a screw mechanism, and a belt mechanism for moving said object along said longitudinal axis of said shaft.

U.S.S.N.: 10/708,955

17

04-0016/015368 (BOE 0480 PA)

Claim 26 (Currently Amended): The aircraft recited in claim 23 wherein said pair of rails has at least one of a rolling member and a sliding member coupled thereto and extending ~~which extends~~ from said lift device for moving said object carrier generally along said at least one lateral axis ~~said first axis~~ of said overhead galley.

Claim 27 (Original): A method for operating an integrated transport system for an aircraft with a main cabin, an overhead cabin disposed above the main cabin, and a shaft in connection between the main cabin and the overhead cabin, comprising:

- securing an object to an object carrier of the integrated transport system;
- actuating a lift device of a single-unit gantry-lift device for moving said object generally along a longitudinal axis of the shaft;

- actuating a gantry device of said single-unit gantry-lift device for moving said object generally along at least one of a first axis of the overhead cabin; and

- moving said object generally along a second axis disposed substantially perpendicular to said first axis;

wherein moving said object generally along said second axis comprises moving said object between said object carrier and a storage area in said overhead cabin.

Claim 28 (Original): The method in claim 27 wherein securing said object to said object carrier comprises:

- coupling said object to said object carrier via at least one restraint member selected from the group consisting of at least one belt member, at least one plate member, at least one netting member, and at least one rope member.

U.S.S.N.: 10/708,955

18

04-0016/015368 (BOE 0480 PA)

Claim 29 (Original): The method in claim 27 wherein actuating said lift device comprises at least one of:

manually operating at least one of a pulley mechanism, a screw mechanism, and a belt mechanism for moving said object along said longitudinal axis of said shaft; and

actuating a motor for moving said object along said longitudinal axis of said shaft.

Claim 30 (Original): The method in claim 27 wherein actuating a gantry device comprises at least one of:

manually operating at least one of a rolling member and a sliding member for moving said object along said first axis of said overhead cabin; and

actuating a motor for moving said object along said first axis of said overhead cabin.

Claim 31 (Original): The method in claim 27 further comprising:

entering the overhead cabin via at least one of a ladder and a staircase extending between the main cabin and the overhead cabin.